



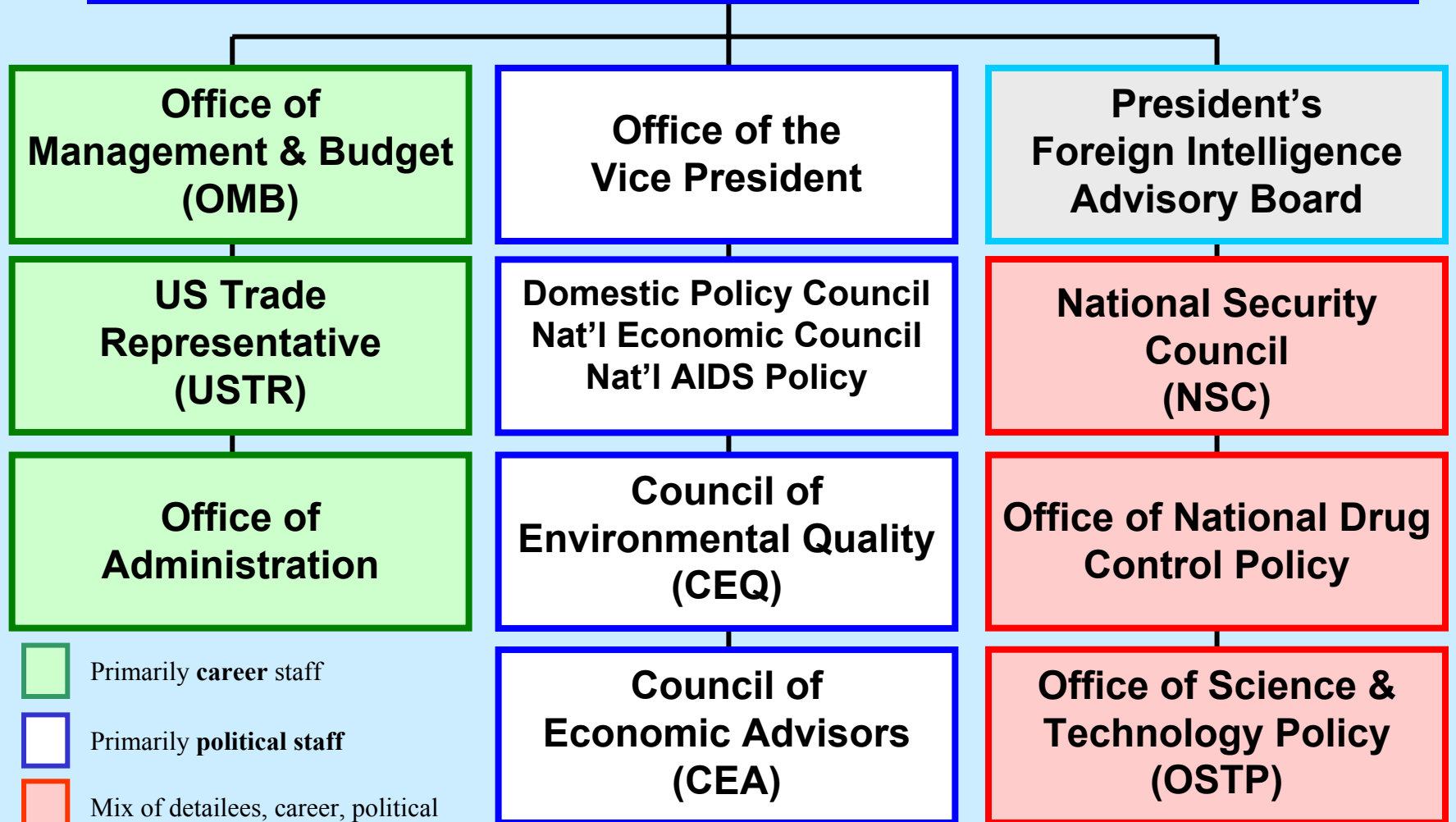
# **Brief Overview of the Office of Science and Technology Policy**

**Patrick Looney**  
**Assistant Director, Physical Science and Engineering**  
**Office of Science & Technology Policy**  
**Executive Office of the President**

# Executive Office of the President (EXOP)

## White House Office

(Homeland Security Council, Office of Faith-Based Initiatives, Freedom Corps)



## **OSTP Mission:**

- 1. Advise the President** (and by implication, EOP.)
- 2. Lead interagency effort** to develop sound S&T policies & budgets.
- 3. Work with the private sector** to match S&T investments to needs.
- 4. Build strong partnerships** among Federal, State, and local governments, other countries, and the scientific community.
- 5. Evaluate** the scale, quality, and effectiveness of the Federal effort in science and technology.

## **External Policy Advisors:**

President's Council of Advisors on Science and Technology (PCAST)

President's Information Technology Advisory Committee (PITAC)

## **Intergovernmental Policy Council:**

National Science and Technology Council (NSTC)

# OSTP Organization

**DIRECTOR**

Associate Director  
Science

Chief of Staff  
General Council

Associate Director  
Technology

Dep. Associate Director  
A.D. Life Science  
A.D. Environment  
A.D. Physical Science  
A.D. Education, Social

A.D. Homeland and Natl.

Dep. Associate Director  
A.D. Technology  
A.D. Telecom/IT  
A.D. Space and Aero

Legislative Affairs  
Communications  
Fed S&T Budget

PCAST Exec. Dir.  
& Legal Council

NSTC Exec Sec  
International Affairs

# Some of the Ongoing OSTP Activities

## **Homeland and National Security**

- Department of Homeland Security
- Sensitive Homeland Security Information

## **Technology**

- Nanotechnology\*
- Information Technology\*
- Tech Policy

## **Space/Aero**

- Columbia tragedy & Implications
- Aeronautics

## **Telecom/IT**

- Media Ownership, Spectrum Allocation\*

## **Life Sciences**

- Bioterrorism & Select Agents
- Human Subjects

## **Education/Social Science**

- Scientific visas\*

## **Agriculture**

- GMOs, Plant/Food Safety.

## **Environment**

- Climate Change Research
- Mercury, Dioxin, etc.

## **Physical Sciences**

- Energy (Nuclear, Fusion)
- Budget
- Facilities

# Presidential Priorities

w/ Direct S&T Coupling

- Winning the War on Terrorism
- Securing the Homeland
- Strengthening the Economy
- National Energy Strategy
- Improving Government: President's Management Agenda

# **FY 2005 OSTP/OMB Priorities Memo**

**1.) R&D for Homeland and National Security**

**2.) Nanotechnology**

**3.) Networking and Information Technology  
R&D**

(includes scientific computing)

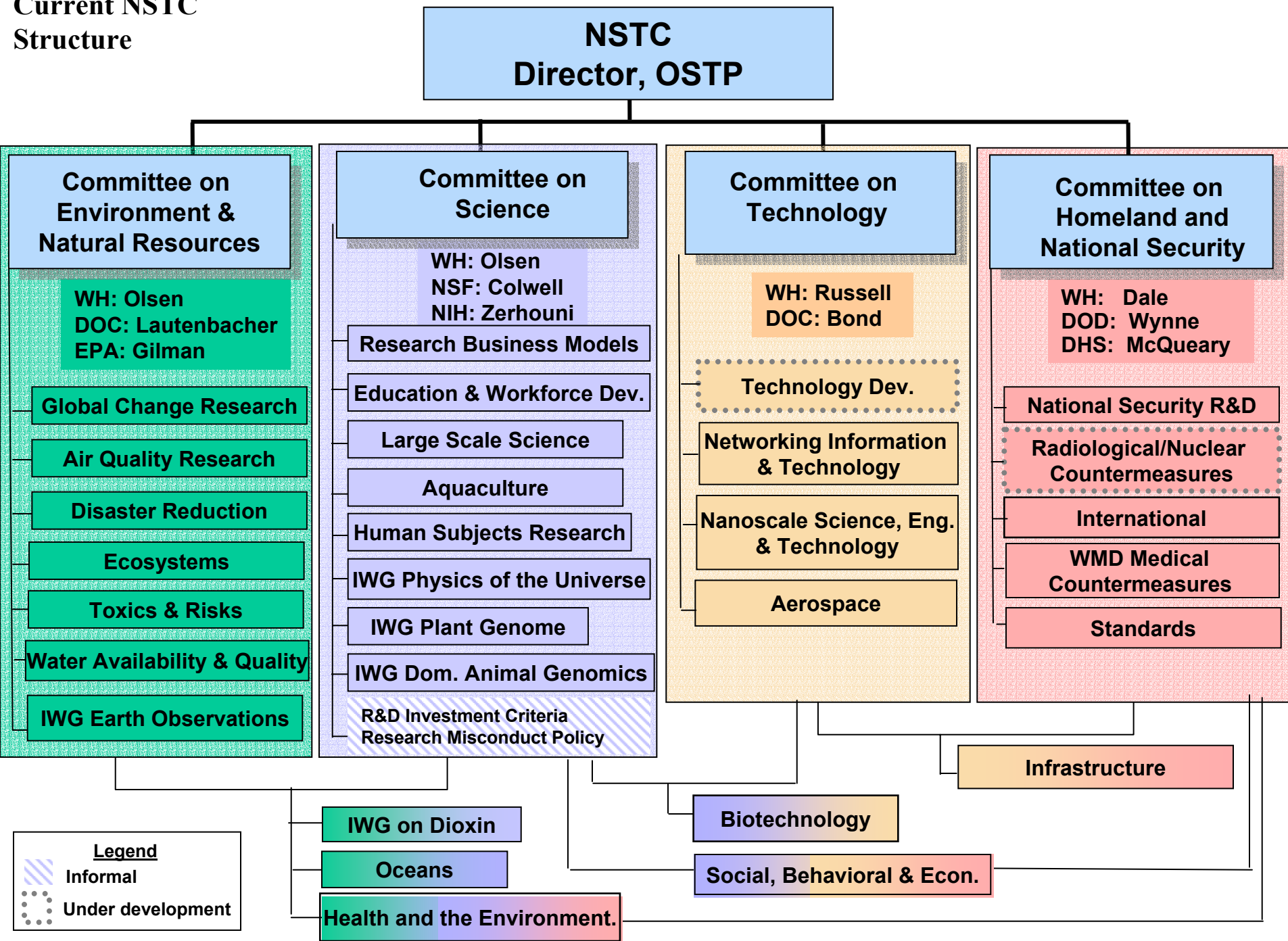
**4.) Molecular-level understanding of life  
processes**

- non-biomedical biology: plant genomics, animal genomics

**5.) Environment and Energy**

- climate change
- environmental observations
- hydrogen R&D

Current NSTC  
Structure





# OSTP Physical Sciences Group Coverage

Department/Agency	Department of Energy			NASA	National Science Foundation			Commerce	Smithsonian
Physical Science Discipline	Office of Science	Nuclear Programs	NNSA	Office of Space Science	Engineering	Mathematical and Physical Science	Polar Research	NIST	
Astronomy				X		X	X		X
Astrophysics	X			X		X			X
Biophysics						X		X	
Chemistry	X			X		X		X	X
Materials Science	X			X	X	X		X	
Mathematics						X			
Physics									
Atomic and Molecular				X		X		X	
Fusion, High Energy Density and Plasma Physics	X		X	X		X		X	
High Energy and Elementary Physics	X			X		X	X		
Relativity				X		X			X
Condensed Matter (Solid State, etc.)	X					X		X	
Polymer Science	X				X	X		X	
Nuclear Engineering		X		X					
BUDGET	\$3B			\$4B		\$1 B		\$0.5B	

# Office of Management & Budget

## SUPPORT OFFICES

General Counsel  
Legislative Affairs  
Communications  
Administration  
Economic Policy  
Legislative Reference  
Budget Review

## DIRECTOR

Deputy Director

Deputy Director for Management

Executive Associate Director

## STATUTORY OFFICES

Office of Federal Financial  
Management (OFFM)  
Office of Federal Procurement  
Policy (OFPP)  
Office of Information &  
Regulatory Affairs (OIRA)

## Resource Management Offices (RMOs)

### Natural Resource Programs

#### ENERGY, SCIENCE & WATER

- Energy
- Science & Space
- Water & Power

#### NATURAL RESOURCES

- Agriculture
- Environment
- Interior

### Human Resource Programs

#### HEALTH

- Health Financing
- Public Health
- HHS Branch

#### EDUCATION & HR

- Education
- Income Maintenance
- Labor
- Personnel Policy

### General Government Programs

#### TRANSPORTATION, HOMELAND, JUSTICE & SERVICES

- Transportation/GSA
- Homeland Security
- Justice

#### HOUSING, TREASURY & COMMERCE

- Commerce
- Treasury
- Housing

### National Security Programs

#### INT'L AFFAIRS

- State/USAI
- Economic Affairs

#### NATIONAL SECURITY

- C<sup>4</sup> & Intelligence
- Ops & Support
- Force Structure &  
Investment
- VA & Defense Health

# Office of Management & Budget

## SUPPORT OFFICES

**DIRECTOR**

## STATUTORY OFFICES

### Resource Management Offices (RMOs)

#### Natural Resource Programs

**DOE, NSF  
NASA, USDA  
USGS, EPA  
Smithsonian**

#### Human Resource Programs

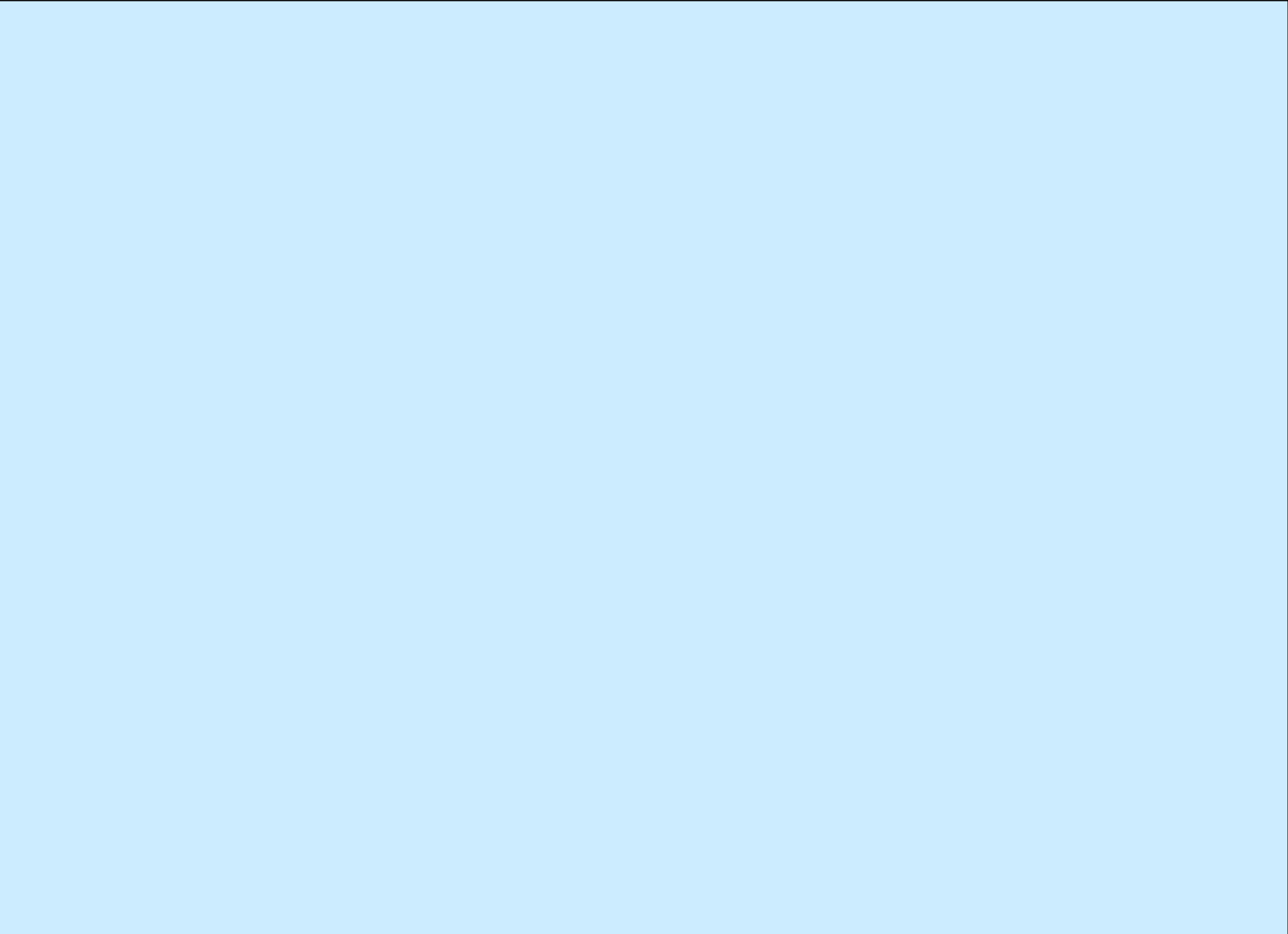
**NIH  
Ed**

#### General Government Programs

**NIST  
NOAA  
DOT  
DHS**

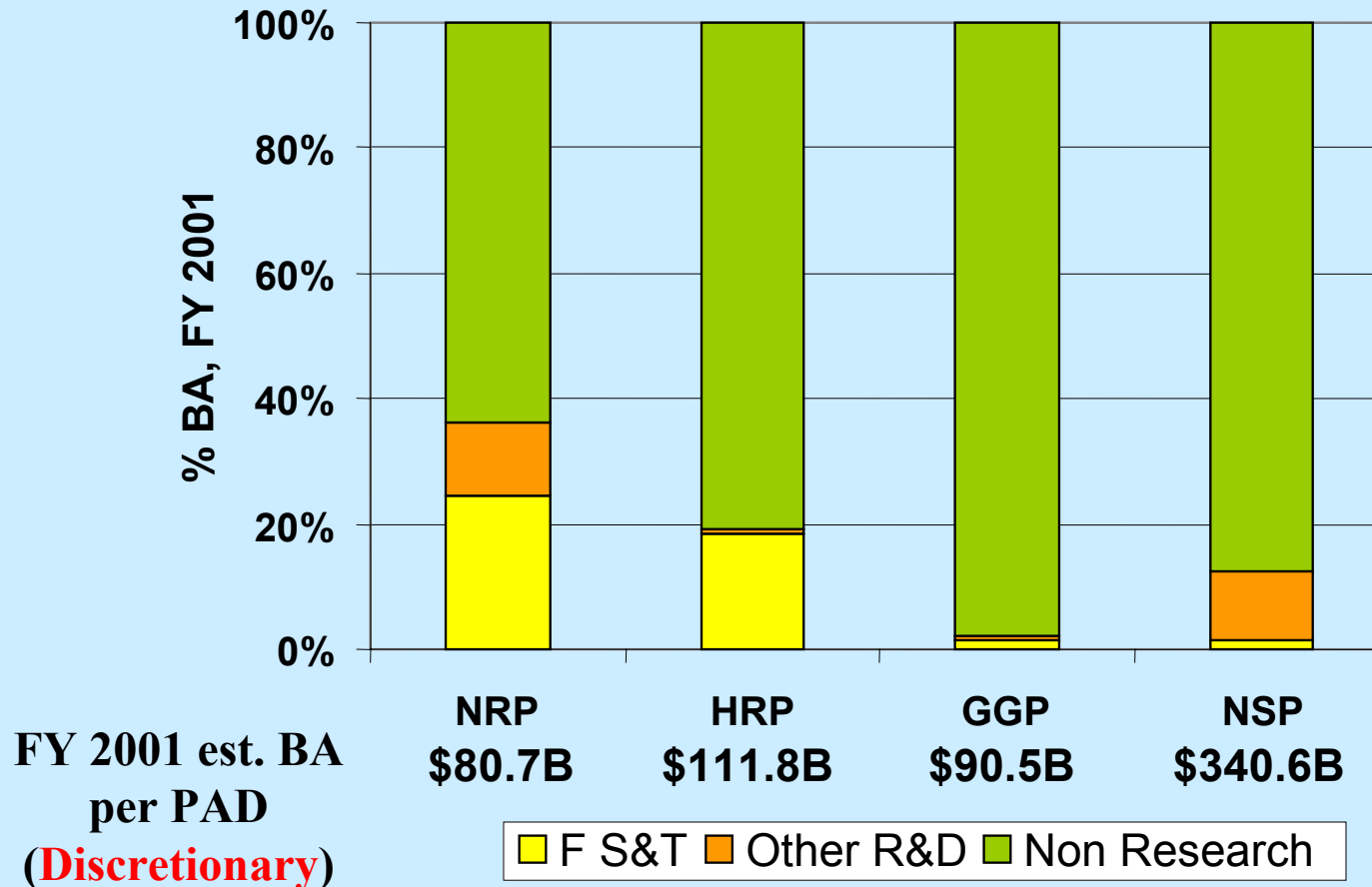
#### National Security Programs

**DOD  
VA**



Backup

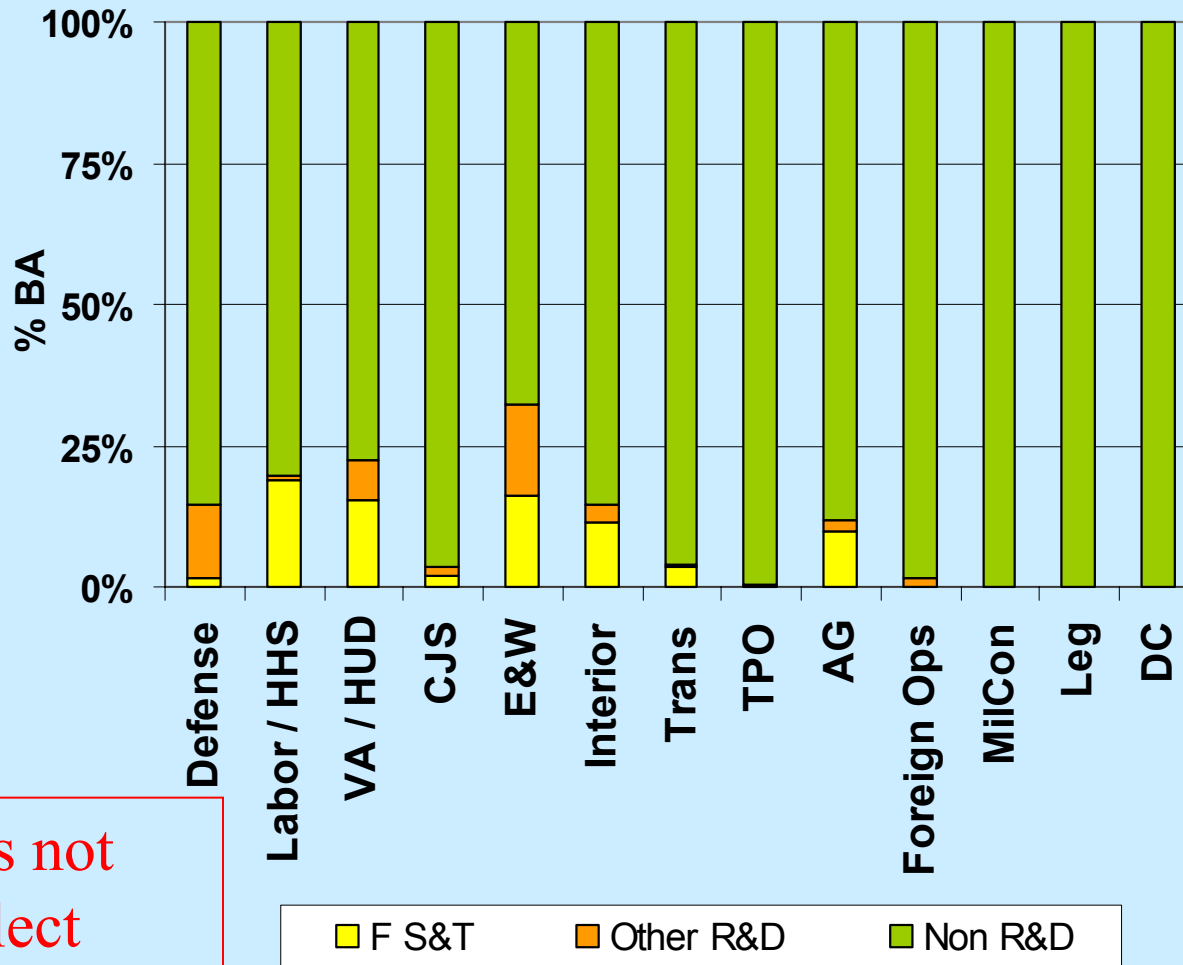
# R&D as a Percentage of OMB PAD \$



Note: F S&T  $\cong$  Basic + Applied  
F S&T + Other R&D = Total R&D

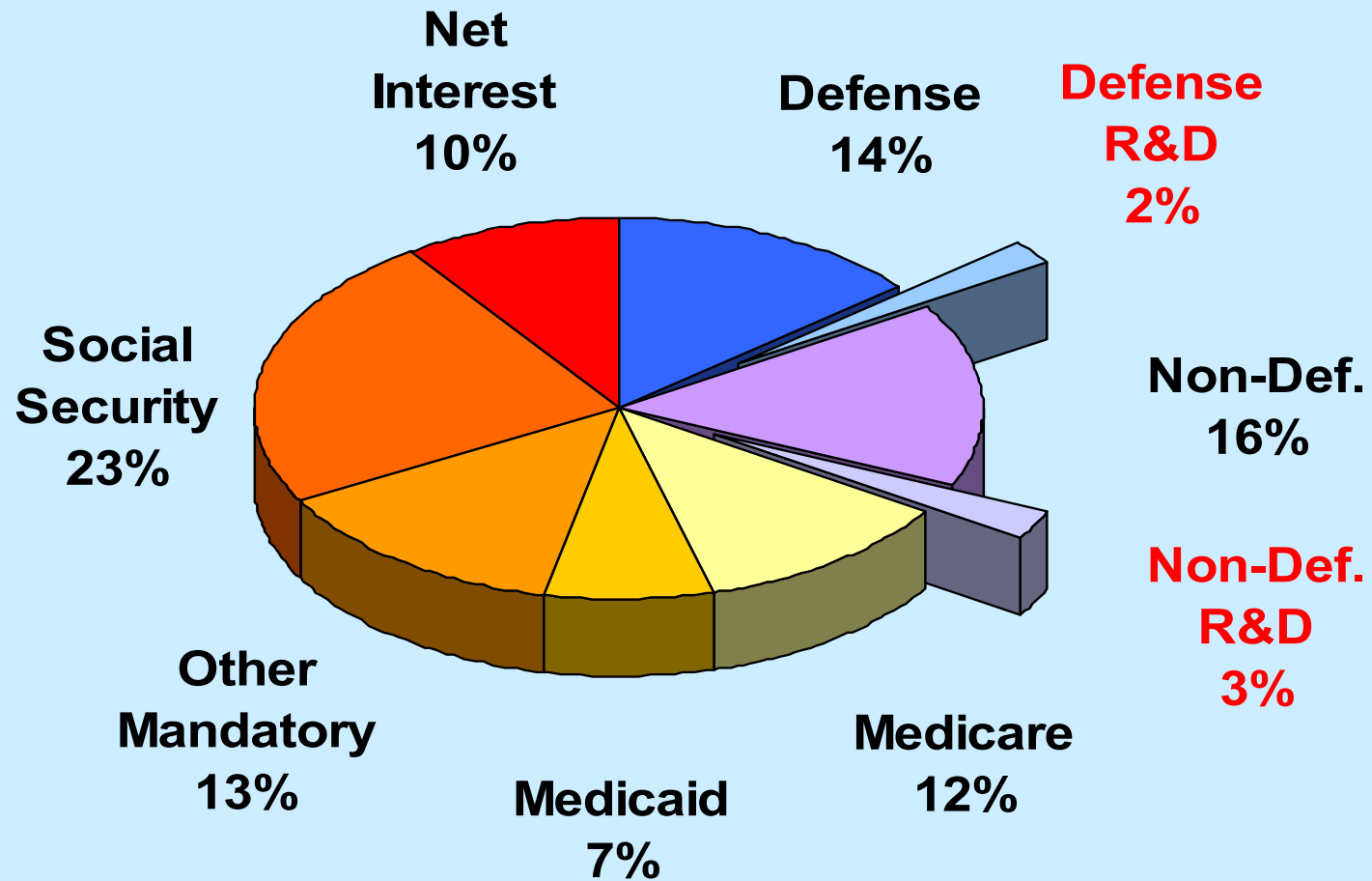
Does not include  
current data

# R&D as % of Approp. Comm. \$



Does not  
reflect  
Current data

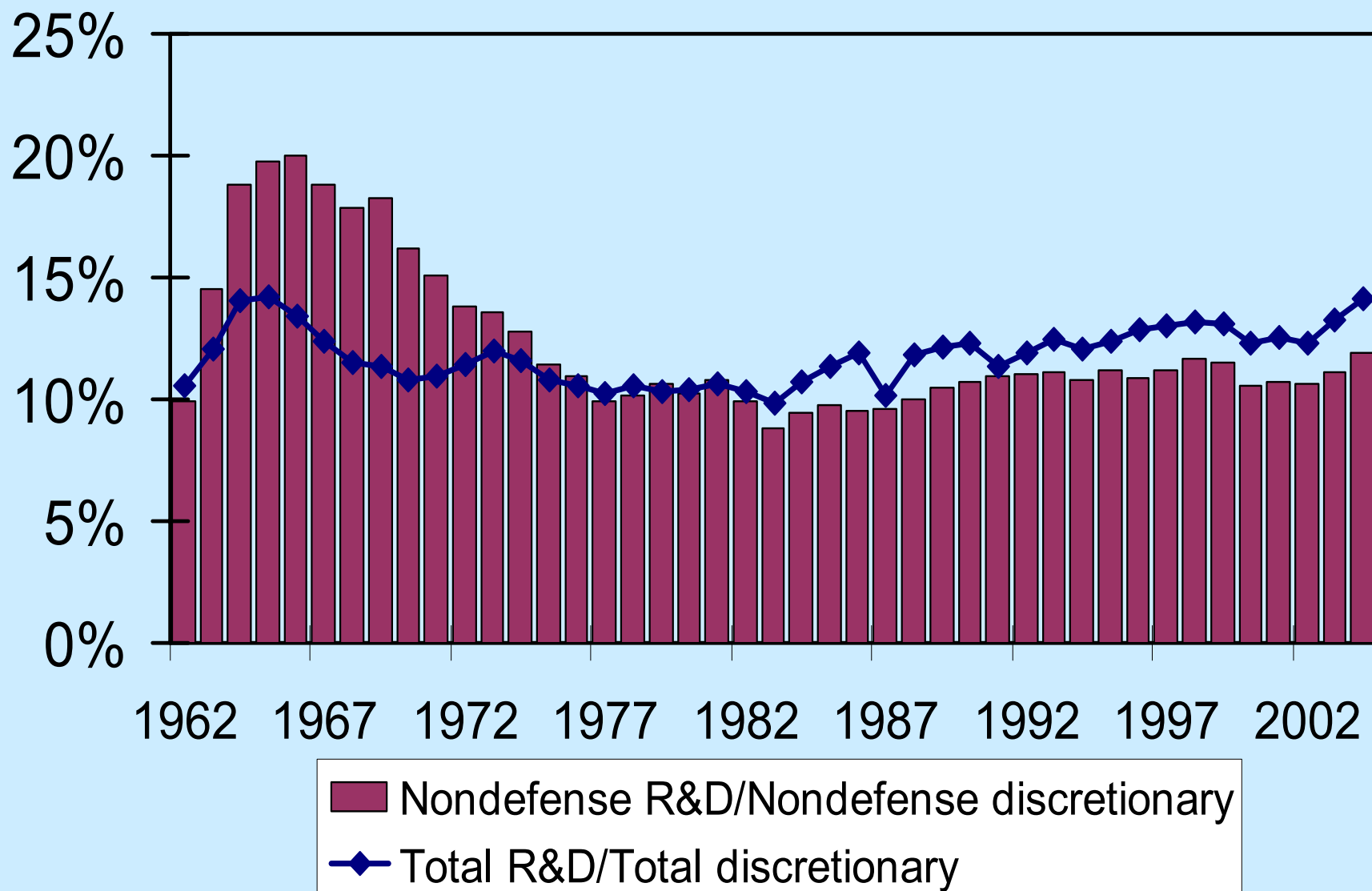
# FY 2002 Proposed Budget (\$2.0 Trillion OL)



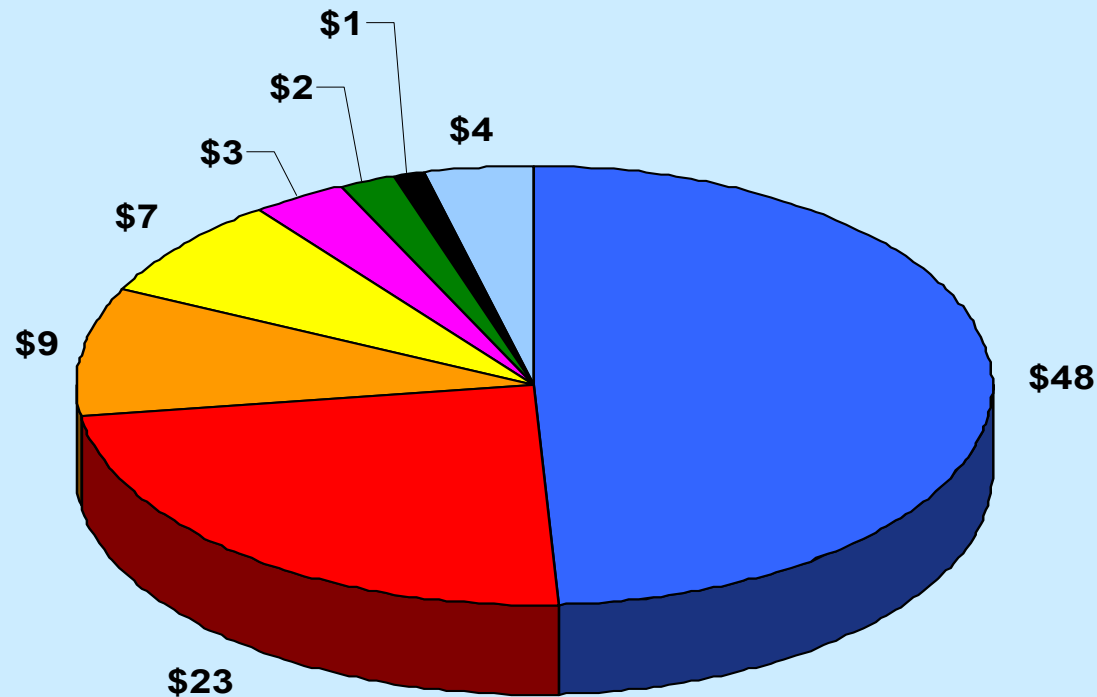
*R&D = 14% of discretionary spending*



## R&D as Percent of Discretionary Spending



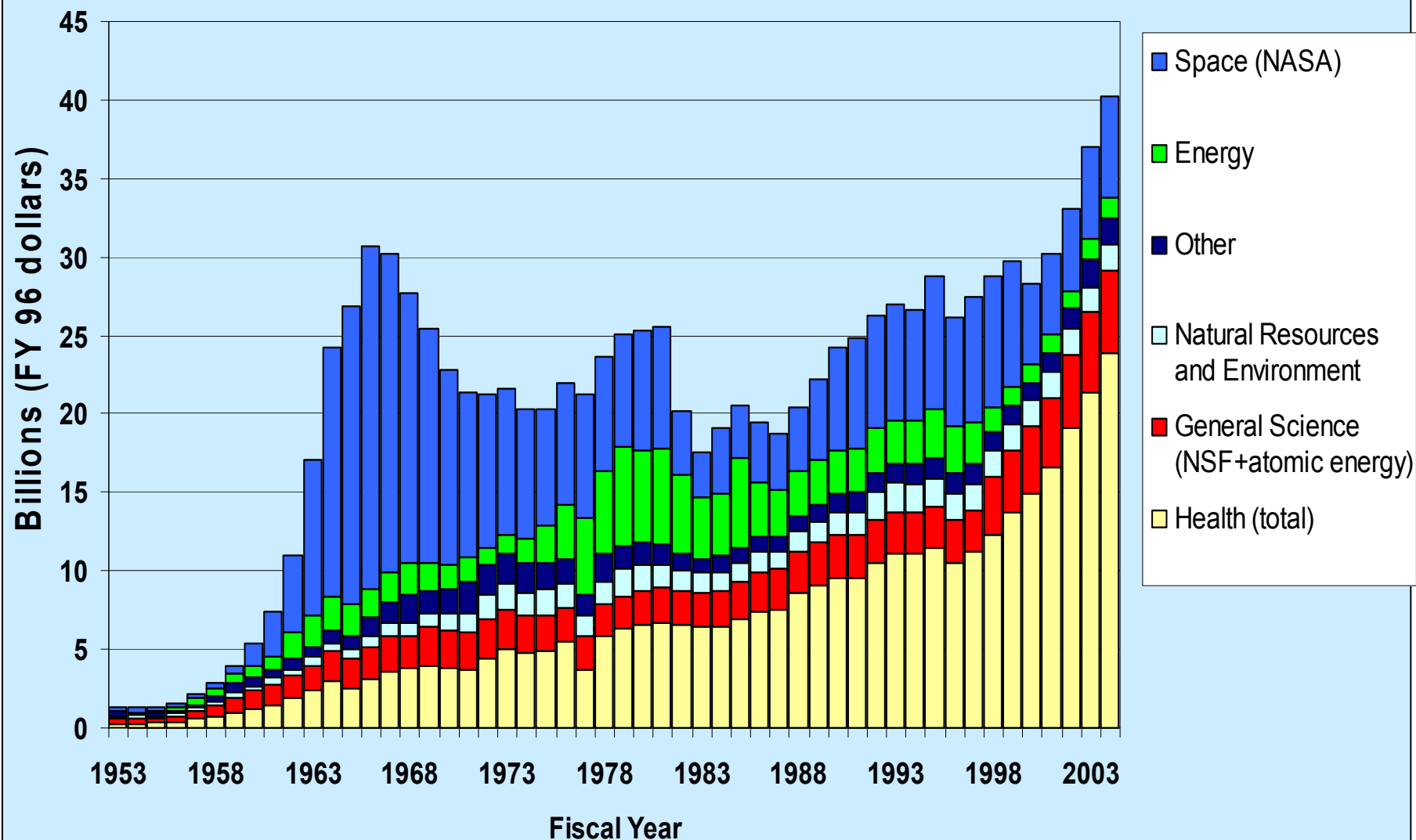
# FY 2002 Proposed R&D Budget (\$98 Billion BA\*)



Defense	HHS	NASA	Energy
NSF	USDA	Commerce	Other

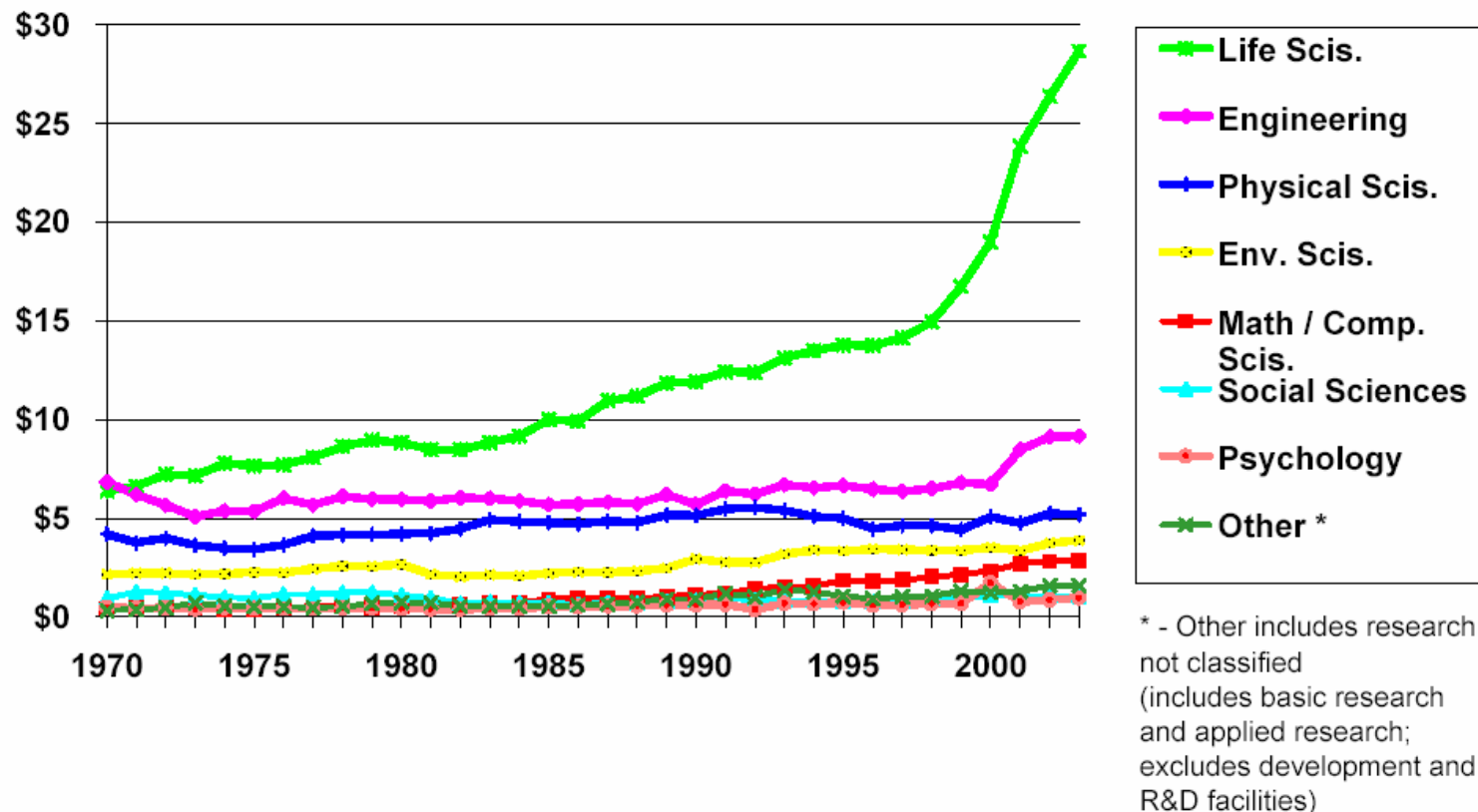
\*Total includes additions resulting from Defense Budget Amendment

## Trends in Nondefense R&D by Function, FY 1953-2004



## Trends in Federal Research by Discipline, FY 1970-2003

obligations in billions of constant FY 2003 dollars



Source: National Science Foundation, *Federal Funds for Research and Development FY 2001, 2002, and 2003*, 2003. FY 2002 and 2003 data are preliminary. Constant-dollar conversions based on OMB's GDP deflators. AUGUST '03 © 2003 AAAS